

# Executive Summary Report

## SMOG CHECK Statewide

Year 2009

### 1. Testing Volume

	All Tests	Failed	Percent (%) Failed
Initial Test	9,825,967	1,221,740	12.43%
Total	11,356,431	1,569,076	13.82%

### 2. Certification Volume

	Certificates Issued	Percent (%) Certificates Issued	No Certificates Issued	Percent (%) No Certificates Issued
Initial Test	8,464,935	86.15%	1,361,032	13.85%
Total	9,594,433	84.48%	1,761,998	15.52%

### 2a. Certification Volume (Test Only)

	Certificates Issued	Percent (%) Certificates Issued	No Certificates Issued	Percent (%) No Certificates Issued
Initial Test	5,190,459	86.13%	835,681	13.87%
Total	5,917,131	85.19%	1,029,024	14.81%

### 3. Initial Test Failures by Failure Type

	Failed	Percent (%) Failed
Gross Polluters	181,591	1.85%
All Emissions	609,940	6.21%
All Visual	142,993	1.46%
All Functional	772,208	7.86%
OBDII	447,963	4.56%
Overall	1,221,740	12.43%

### 4. Initial Test Failures by Program Area

Program Areas	Initial Tests	Failed	Percent (%) Failed	Gross Polluters	Percent (%) Gross Polluters
Enhanced	7,886,928	992,647	12.59%	145,153	1.84%
Partially Enhanced	486,119	71,205	14.65%	10,486	2.16%
Basic	894,450	100,947	11.29%	16,478	1.84%
Change of Ownership	61,975	9,319	15.04%	2,372	3.83%
No Program	71	14	19.72%	3	4.23%
Unknown Program	496,424	47,608	9.59%	7,099	1.43%
Total Program Area	9,825,967	1,221,740	12.43%	181,591	1.85%

### 5. Initial Test Failures by Station Type

Station Types	Initial Tests	Failed	Percent (%) Failed	Gross Polluters	Percent (%) Gross Polluters
Test Only	6,026,140	817,923	13.57%	128,149	2.13%
Regular	2,841,204	254,594	8.96%	30,984	1.09%
Basic Area Dealer	51,100	2,425	4.75%	240	0.47%
Gold Shield in Enhanced Area	688,731	113,388	16.46%	16,157	2.35%
Gold Shield in Basic Area	117,723	18,192	15.45%	3,269	2.78%
Gold Shield in COO Area	53,442	7,382	13.81%	1,805	3.38%
Business Fleet	133	3	2.26%	0	0.00%
Permanent Fleet Registered	661	61	9.23%	8	1.21%
Referee	8,633	4,636	53.70%	704	8.15%
Government Fleet	38,174	3,136	8.22%	275	0.72%
Unknown Privilege	23	0	0.00%	0	0.00%
Total	9,825,967	1,221,740	12.43%	181,591	1.85%

### 5.a. Initial Tests at Test-Only Stations

	Initial Tests	Certificates Issued
Volunteers	3,178,616	2,852,890
Directed Vehicles	2,847,524	2,337,569
Total	6,026,140	5,190,459

### 5.b. Initial Tests at Gold Shield Stations

	Initial Tests	Certificates Issued
Volunteers	628,097	536,256
Directed Vehicles	231,802	175,365
Total	859,899	711,621

**6. Initial Tests by Vehicle Model Year**

Model Year	Initial Tests	Failed Overall	Percent (%) Failed Overall	Percent (%) Failed Emissions	Percent (%) Failed Gross Polluters	Percent (%) Failed Functional	Percent (%) Failed Visual	Percent (%) Failed OBDII
MY-0	16	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
MY-1932	1	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
MY-1934	1	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
MY-1947	1	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
MY-1960	5	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
MY-1964	3	2	66.67%	66.67%	66.67%	0.00%	0.00%	0.00%
MY-1965	5	3	60.00%	60.00%	60.00%	0.00%	0.00%	0.00%
MY-1966	2	1	50.00%	50.00%	50.00%	0.00%	0.00%	0.00%
MY-1967	3	1	33.33%	0.00%	0.00%	33.33%	33.33%	0.00%
MY-1968	2	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
MY-1969	3	1	33.33%	33.33%	33.33%	0.00%	0.00%	0.00%
MY-1970	9	3	33.33%	22.22%	22.22%	11.11%	22.22%	0.00%
MY-1971	4	2	50.00%	25.00%	0.00%	50.00%	50.00%	0.00%
MY-1972	4	1	25.00%	25.00%	25.00%	25.00%	25.00%	0.00%
MY-1973	5	3	60.00%	40.00%	20.00%	40.00%	40.00%	0.00%
MY-1974	32	14	43.75%	34.38%	12.50%	15.63%	6.25%	0.00%
MY-1975	83	22	26.51%	19.28%	9.64%	15.66%	7.23%	0.00%
MY-1976	14,248	4,244	29.79%	19.98%	9.24%	17.60%	8.41%	0.00%
MY-1977	19,862	5,760	29.00%	17.84%	8.29%	18.45%	8.08%	0.00%
MY-1978	22,636	6,750	29.82%	18.47%	9.06%	18.80%	8.50%	0.00%
MY-1979	25,408	7,929	31.21%	20.32%	9.73%	19.54%	8.65%	0.00%
MY-1980	15,342	4,455	29.04%	20.04%	10.47%	17.19%	8.17%	0.00%
MY-1981	18,008	5,422	30.11%	22.72%	10.80%	16.73%	8.26%	0.00%
MY-1982	20,776	6,132	29.51%	22.29%	10.32%	15.66%	7.86%	0.00%
MY-1983	28,076	8,260	29.42%	22.59%	10.40%	16.31%	7.69%	0.00%
MY-1984	51,447	15,745	30.60%	23.81%	11.65%	16.82%	7.42%	0.00%
MY-1985	69,618	20,430	29.35%	22.47%	10.58%	16.09%	6.57%	0.00%
MY-1986	99,174	27,271	27.50%	20.24%	9.19%	15.35%	5.60%	0.00%
MY-1987	118,046	33,373	28.27%	21.54%	8.80%	14.83%	5.19%	0.00%
MY-1988	142,785	37,312	26.13%	19.34%	7.53%	14.01%	4.57%	0.00%
MY-1989	194,515	46,223	23.76%	17.07%	6.37%	13.06%	3.78%	0.00%
MY-1990	233,044	53,117	22.79%	16.58%	5.84%	11.98%	3.24%	0.00%
MY-1991	275,209	59,445	21.60%	15.67%	5.16%	11.29%	2.74%	0.00%
MY-1992	275,520	56,645	20.56%	14.74%	4.85%	10.26%	2.66%	0.00%
MY-1993	336,360	75,674	22.50%	17.03%	4.25%	10.22%	2.60%	0.00%
MY-1994	380,486	76,077	19.99%	13.89%	3.22%	9.76%	2.48%	0.00%
MY-1995	551,981	90,153	16.33%	11.04%	2.44%	7.70%	2.00%	0.00%
MY-1996	386,543	73,285	18.96%	8.24%	1.39%	12.79%	1.51%	12.68%
MY-1997	689,331	97,071	14.08%	5.46%	0.92%	9.68%	1.07%	9.59%
MY-1998	532,383	69,794	13.11%	4.38%	0.79%	9.42%	1.01%	9.52%
MY-1999	914,148	80,449	8.80%	2.17%	0.41%	6.68%	0.72%	6.78%
MY-2000	560,342	56,394	10.06%	2.12%	0.50%	8.01%	0.74%	8.16%
MY-2001	1,308,444	91,959	7.03%	0.89%	0.20%	5.91%	0.49%	6.03%
MY-2002	450,110	31,434	6.98%	0.93%	0.23%	5.83%	0.53%	5.96%
MY-2003	1,449,066	61,843	4.27%	0.43%	0.12%	3.61%	0.31%	3.65%
MY-2004	220,124	7,521	3.42%	0.39%	0.09%	2.85%	0.25%	2.83%
MY-2005	192,016	6,192	3.22%	0.27%	0.07%	2.72%	0.18%	2.75%
MY-2006	88,110	2,501	2.84%	0.25%	0.06%	2.34%	0.23%	2.35%
MY-2007	60,362	1,535	2.54%	0.17%	0.03%	2.13%	0.17%	2.18%
MY-2008	59,542	889	1.49%	0.15%	0.03%	1.23%	0.11%	1.18%
MY-2009	20,884	380	1.82%	0.47%	0.17%	1.29%	0.26%	1.21%
MY-2010	1,841	22	1.20%	0.05%	0.05%	1.14%	0.05%	1.03%
MY-2011	1	1	100.00%	0.00%	0.00%	100.00%	0.00%	100.00%
All Model Years	9,825,967	1,221,740	12.43%	6.21%	1.85%	7.86%	1.46%	4.56%

## 7. Referee Activity

	Certificates Issued
Certificate of Compliance	6,579
Certificate of Non Compliance	12
Parts Cost	1,914
Hardship Extensions	2,549
Exempt Vehicle	498
Exempted by Directive	1,329
Parts Exemption	125
Unknown Outcome	0
Permanently Exempt Vehicle	0
Temporarily Exempt Vehicle	0
	<b>13,006</b>

## 8. Active Stations

	Station Count
Licensed Stations that did not Conduct a Test	1,031
Stations Locked-Out at Least Once	1,048
Stations Conducted at Least One Test	7,968

## 9. Active Technicians

License Type	Endorsement	Technician Count	Daily Average
EA	Both Endorsement	11,577	5,872
EA	Gas Endorsement	10	0
EB	Both Endorsement	60	0
EB	Gas Endorsement	556	0
EU	Both Endorsement	1	0
EU	Gas Endorsement	1	0
GU	Both Endorsement	20	0

## 10. Inspection Costs

	ASM Initial Test Count	Avg ASM Inspection Cost	TSI Initial Test Count	Avg TSI Inspection Cost	Total Initial Tests	Overall Average Inspection Cost
Test Only	5,276,441	48.90	678,875	49.76	5,955,316	49.00
Test and Repair	1,835,324	47.05	973,345	47.11	2,808,669	47.08
Test and Repair Dealer	353	72.78	50,661	51.68	51,014	51.83
Referee	3,415	30.00	1,356	30.00	4,771	30.00
Gold Shield in Enhanced Area	571,318	48.44	115,810	48.00	687,128	48.36
Gold Shield in Basic Area	3,465	62.42	114,253	39.47	117,718	40.14
Gold Shield in COO Area	3,050	54.71	50,387	51.38	53,437	51.57

## 11. Repair Costs

Repair Type	All Cost Ranges	Repair Count	Average Cost	(All Cost Ranges) Repair Count	(All Cost Ranges) Average Cost
Regular Repairs	\$0-50	84,925	21.99	<b>272,390</b>	<b>212.92</b>
	\$51-150	67,590	100.20		
	\$151-250	40,898	199.83		
	\$251-450	46,079	337.40		
	Over \$450	32,898	779.30		
CAP Repairs	\$0-50	1,596	23.40	<b>56,406</b>	<b>399.77</b>
	\$51-150	2,870	106.41		
	\$151-250	5,680	205.85		
	\$251-450	18,718	355.82		
	Over \$450	27,542	522.00		
Total Repairs	\$0-50	70,510	22.17	<b>284,506</b>	<b>283.11</b>
	\$51-150	52,904	99.96		
	\$151-250	40,101	201.18		
	\$251-450	57,956	343.85		
	Over \$450	63,035	724.98		

## 12. CAP Repair Costs

	Total Vehicles	Average Repair Cost
CAP Repairs	52,777	399.77

## 13. Drill-Through

	Program Areas	Station Types	Certificates Issued	Total Failed	Gross Polluters	Tampered	All OBD-II Failed	All Emission Failed	All Functional Failed	All Visual Failed
Acceleration Simulation Mode (ASM)	Basic	Gold Shield in Enhanced Area	76	24	4	1	7	18	13	1
Acceleration Simulation Mode (ASM)	Basic	Referee	6	8	1	4	3	6	5	4

	Program Areas	Station Types	Certificates Issued	Total Failed	Gross Polluters	Tampered	All OBD-II Failed	All Emission Failed	All Functional Failed	All Visual Failed
Acceleration Simulation Mode (ASM)	Basic	Test and Repair	480	75	9	1	21	45	39	5
Acceleration Simulation Mode (ASM)	Basic	Test Only	331	79	14	5	23	48	44	11
Acceleration Simulation Mode (ASM)	Change of Ownership	Gold Shield in COO Area	6	2	0	1	0	2	1	1
Acceleration Simulation Mode (ASM)	Change of Ownership	Referee	0	2	0	1	0	1	2	1
Acceleration Simulation Mode (ASM)	Change of Ownership	Test and Repair	55	13	2	2	4	10	6	2
Acceleration Simulation Mode (ASM)	Change of Ownership	Test Only	67	7	3	0	1	5	5	1
Acceleration Simulation Mode (ASM)	Enhanced	Gold Shield in Basic Area	2,343	512	68	19	135	278	257	75
Acceleration Simulation Mode (ASM)	Enhanced	Gold Shield in COO Area	2,283	434	54	27	152	212	272	59
Acceleration Simulation Mode (ASM)	Enhanced	Gold Shield in Enhanced Area	408,653	85,761	11,871	4,331	31,068	43,425	53,875	10,530
Acceleration Simulation Mode (ASM)	Enhanced	Government Fleet	0	1,012	57	13	555	341	637	21
Acceleration Simulation Mode (ASM)	Enhanced	Permanent Fleet Registered	208	20	1	0	15	3	17	0
Acceleration Simulation Mode (ASM)	Enhanced	Referee	2,163	2,421	449	991	582	1,235	1,212	1,294
Acceleration Simulation Mode (ASM)	Enhanced	Test and Repair	1,302,511	120,909	11,869	6,100	66,471	44,784	85,484	12,035
Acceleration Simulation Mode (ASM)	Enhanced	Test and Repair Dealer	110	7	0	1	4	1	6	1
Acceleration Simulation Mode (ASM)	Enhanced	Test Only	4,297,097	718,192	112,459	38,702	230,915	403,161	433,936	83,373
Acceleration Simulation Mode (ASM)	No Program	Test and Repair	17	2	1	0	0	2	1	0
Acceleration Simulation Mode (ASM)	No Program	Test Only	32	11	2	1	1	9	6	2
Acceleration Simulation Mode (ASM)	Partial	Gold Shield in Basic Area	439	144	30	7	42	86	89	13
Acceleration Simulation Mode (ASM)	Partial	Gold Shield in COO Area	169	31	5	5	8	18	15	9
Acceleration Simulation Mode (ASM)	Partial	Gold Shield in Enhanced Area	40,229	10,199	1,525	516	3,486	5,274	6,445	1,167

	Program Areas	Station Types	Certificates Issued	Total Failed	Gross Polluters	Tampered	All OBD-II Failed	All Emission Failed	All Functional Failed	All Visual Failed
Acceleration Simulation Mode (ASM)	Partial	Government Fleet	0	33	6	0	14	19	12	0
Acceleration Simulation Mode (ASM)	Partial	Referee	119	184	30	97	32	90	93	124
Acceleration Simulation Mode (ASM)	Partial	Test and Repair	198,612	34,612	4,852	1,819	10,824	18,446	20,970	4,012
Acceleration Simulation Mode (ASM)	Partial	Test and Repair Dealer	165	21	2	1	10	9	13	4
Acceleration Simulation Mode (ASM)	Partial	Test Only	121,679	21,672	3,344	1,186	6,745	12,165	12,690	2,420
Acceleration Simulation Mode (ASM)	Unknown Program	Gold Shield in COO Area	88	22	1	0	9	10	15	2
Acceleration Simulation Mode (ASM)	Unknown Program	Gold Shield in Enhanced Area	17,956	3,395	512	274	1,410	1,743	2,149	527
Acceleration Simulation Mode (ASM)	Unknown Program	Government Fleet	0	1,684	143	8	364	1,183	550	9
Acceleration Simulation Mode (ASM)	Unknown Program	Referee	311	161	32	71	38	79	96	94
Acceleration Simulation Mode (ASM)	Unknown Program	Test and Repair	135,403	12,536	1,577	767	5,947	5,676	8,139	1,473
Acceleration Simulation Mode (ASM)	Unknown Program	Test and Repair Dealer	37	2	0	0	0	2	0	0
Acceleration Simulation Mode (ASM)	Unknown Program	Test Only	138,751	19,404	3,244	1,349	7,858	10,516	12,075	2,655
Two Speed Idle (TSI)	Basic	Gold Shield in Basic Area	85,891	16,027	2,915	1,118	5,025	5,868	10,751	2,661
Two Speed Idle (TSI)	Basic	Gold Shield in COO Area	3,732	535	109	24	178	206	361	54
Two Speed Idle (TSI)	Basic	Gold Shield in Enhanced Area	30,629	5,761	919	369	2,085	1,878	3,942	1,044
Two Speed Idle (TSI)	Basic	Government Fleet	0	83	16	1	39	29	53	1
Two Speed Idle (TSI)	Basic	Referee	342	406	85	184	92	143	252	253
Two Speed Idle (TSI)	Basic	Test and Repair	521,873	62,218	9,581	3,303	21,814	20,748	44,556	7,082
Two Speed Idle (TSI)	Basic	Test and Repair Dealer	37,130	2,019	218	86	749	530	1,458	263
Two Speed Idle (TSI)	Basic	Test Only	92,828	13,591	2,607	748	5,002	5,269	8,926	1,761
Two Speed Idle (TSI)	Change of Ownership	Gold Shield in Basic Area	734	221	50	24	58	93	153	42
Two Speed Idle (TSI)	Change of Ownership	Gold Shield in COO Area	21,381	4,443	1,217	320	1,050	2,237	2,716	590
Two Speed Idle (TSI)	Change of Ownership	Gold Shield in Enhanced Area	1,878	459	120	42	120	206	303	92
Two Speed Idle (TSI)	Change of Ownership	Government Fleet	0	3	1	0	2	1	2	1

	Program Areas	Station Types	Certificates Issued	Total Failed	Gross Polluters	Tampered	All OBD-II Failed	All Emission Failed	All Functional Failed	All Visual Failed
Two Speed Idle (TSI)	Change of Ownership	Referee	42	79	24	39	22	39	48	54
Two Speed Idle (TSI)	Change of Ownership	Test and Repair	17,434	2,315	492	161	846	947	1,603	305
Two Speed Idle (TSI)	Change of Ownership	Test and Repair Dealer	361	26	3	1	16	5	23	1
Two Speed Idle (TSI)	Change of Ownership	Test Only	9,809	1,725	460	139	446	863	1,027	277
Two Speed Idle (TSI)	Enhanced	Gold Shield in Basic Area	4,376	476	55	37	248	115	332	79
Two Speed Idle (TSI)	Enhanced	Gold Shield in COO Area	5,636	501	82	25	231	170	355	49
Two Speed Idle (TSI)	Enhanced	Gold Shield in Enhanced Area	59,018	6,573	984	337	3,417	1,843	4,870	765
Two Speed Idle (TSI)	Enhanced	Government Fleet	0	224	40	0	105	80	141	2
Two Speed Idle (TSI)	Enhanced	Permanent Fleet Registered	280	36	7	1	6	12	21	18
Two Speed Idle (TSI)	Enhanced	Referee	511	308	42	166	115	67	153	192
Two Speed Idle (TSI)	Enhanced	Test and Repair	251,649	14,895	1,630	739	9,230	3,263	11,576	1,425
Two Speed Idle (TSI)	Enhanced	Test and Repair Dealer	4,383	192	9	2	147	22	167	9
Two Speed Idle (TSI)	Enhanced	Test Only	480,907	39,608	5,476	1,757	22,875	11,013	28,681	3,579
Two Speed Idle (TSI)	Partial	Gold Shield in Basic Area	529	56	14	4	24	21	35	11
Two Speed Idle (TSI)	Partial	Gold Shield in COO Area	562	42	10	4	14	15	24	7
Two Speed Idle (TSI)	Partial	Gold Shield in Enhanced Area	4,355	615	125	37	280	215	430	76
Two Speed Idle (TSI)	Partial	Government Fleet	0	4	1	0	2	1	3	0
Two Speed Idle (TSI)	Partial	Referee	23	14	3	9	9	6	13	13
Two Speed Idle (TSI)	Partial	Test and Repair	24,740	2,287	339	116	1,090	689	1,668	268
Two Speed Idle (TSI)	Partial	Test and Repair Dealer	506	28	0	1	17	5	25	2
Two Speed Idle (TSI)	Partial	Test Only	12,579	1,214	200	66	627	369	851	131
Two Speed Idle (TSI)	Unknown Program	Gold Shield in Basic Area	3,950	754	137	83	303	238	543	167
Two Speed Idle (TSI)	Unknown Program	Gold Shield in COO Area	11,326	1,371	327	127	471	595	932	229
Two Speed Idle (TSI)	Unknown Program	Gold Shield in Enhanced Area	5,337	598	97	51	287	186	432	98
Two Speed Idle (TSI)	Unknown Program	Government Fleet	0	93	11	2	46	28	64	2
Two Speed Idle (TSI)	Unknown Program	Referee	247	84	38	28	15	50	39	37
Two Speed Idle (TSI)	Unknown Program	Test and Repair	58,003	4,728	632	315	2,588	1,287	3,578	584
Two Speed Idle (TSI)	Unknown Program	Test and Repair Dealer	4,536	130	8	9	76	20	109	16
Two Speed Idle (TSI)	Unknown Program	Test Only	36,308	2,418	340	155	1,434	678	1,792	286

	Program Areas	Station Types	Certificates Issued	Total Failed	Gross Polluters	Tampered	All OBD-II Failed	All Emission Failed	All Functional Failed	All Visual Failed
UnKnown TestType	Basic	Referee	19	116	0	65	0	116	1	67
UnKnown TestType	Basic	Test and Repair	11	2	0	1	1	3	1	1
UnKnown TestType	Basic	Test and Repair Dealer	2	0	0	0	0	1	0	0
UnKnown TestType	Change of Ownership	Gold Shield in COO Area	1	0	0	0	0	1	0	0
UnKnown TestType	Change of Ownership	Referee	3	23	0	11	0	23	1	13
UnKnown TestType	Enhanced	Gold Shield in Enhanced Area	4	1	0	0	0	2	0	1
UnKnown TestType	Enhanced	Referee	97	561	0	297	1	561	9	321
UnKnown TestType	Enhanced	Test and Repair	47	1	0	0	1	3	1	0
UnKnown TestType	Enhanced	Test Only	49	0	0	0	0	4	0	0
UnKnown TestType	Partial	Referee	10	49	0	26	0	49	0	27
UnKnown TestType	Partial	Test and Repair	16	0	0	0	0	1	0	0
UnKnown TestType	Partial	Test Only	4	0	0	0	0	1	0	0
UnKnown TestType	Unknown Program	Gold Shield in COO Area	1	1	0	0	1	1	1	0
UnKnown TestType	Unknown Program	Gold Shield in Enhanced Area	3	1	0	0	1	1	1	0
UnKnown TestType	Unknown Program	Referee	182	220	0	100	2	219	3	112
UnKnown TestType	Unknown Program	Test and Repair	21	1	0	0	1	1	1	0
UnKnown TestType	Unknown Program	Test Only	9	1	0	0	1	1	1	0